

ABSTRACT

A loop-type thermosiphon capable of stable operation regardless of fluctuation of heat load and a Stirling refrigerator using the same are provided. The loop-type thermosiphon transferring heat from a high-temperature heat source (5) using a working fluid includes a evaporator (1) having a heat absorption portion (1a) and evaporating the working fluid by depriving the high-temperature heat source of heat through the heat absorption portion, a condenser (3) located above the high-temperature heat source and condensing the working fluid that has evaporated in the evaporator, and a pipe (2, 4) connecting the evaporator and the condenser so as to form a loop. In the loop-type thermosiphon, the working fluid (22) that has passed through the condenser (3) is brought in contact with the heat absorption portion (1a) before it is pooled in a liquid pool (21) for the working fluid in the evaporator, so as to exchange heat with the same